Yat Ha (Anna) Yau

Final Lesson Plan

**Lesson Topic:**  Plants in Compost

**Grade:** K

**Lesson duration:** 45 min

**Subject:** Science

**Purpose:**

Students will become aware that composting helps the environment and reduces the trash we send to the landfills. Students will understand compost adds nutrients for plants so they can be strong and healthy. Healthy plants mean healthy animals and people.

**Objective:**

Students will be able observe and record the effects of compost on the seeds and the growth of plants.

Students will learn about the benefits and uses of compost.

**Professional Goal:**

Component 3c - Engaging Students in Learning

**Standards:**

1.1b Plants require air, water, nutrients, and light in order to live and thrive.

1.2a Living things grow, take in nutrients, breathe, reproduce, eliminate waste, and die.

4.2a Growth is the process by which plants and animals increase in size.

**Materials:**

* Compost
* Empty six-pack planter containers (one per group)
* Drip trays for planters
* Potting soil
* Large seeds, such as bean or from pumpkins
* Measuring tapes
* Plants in compost worksheet
* Masking tape
* Markers

**Procedure:**

1. Introduce activity by reviewing what compost is, what soil is, and introduce how compost benefits plants.
2. Divide students into small groups.
3. Hand out materials. Have students use tape to mark half section of six-pack planter container with the heading, soil and the other half section with the heading, compost and soil.
4. Fill the half section (in a row) with soil.
5. Fill the other half section (in a row) with compost and soil.
6. Place three seeds in each of the container of the six-pack planter. You may wish to use beans or pumpkin seeds, since they sprout easily.
7. Water the seeds and set aside in a warm, sunny area.
8. Gather students on the rug, make predictions about the experiment: Which seeds will sprout first? Which will grow faster, seeds in soil or seeds in soil with compost? Why?
9. Record their answers on the chart paper
10. After one week, return and examine the progress of the seeds. Measure the height of each plant and record on the observation sheet.
11. Continue to measure the height of each plant every few days and record on the sheet.
12. After two or three weeks, ask students to draw conclusions from looking at their data on the recording sheet.

**Assessment:**

* Students’ measurement recording sheets on plants.
* Drawing or telling of the benefits on composting.

Rubrics

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| **Able to accurately measure the plant.** | **Able to measure the plant with some accuracy.** | **Able to measure the plant with few accuracy.** | **Unable to measure the plant.** |
| **Able to draw or tell 4 or more benefits on composting.** | **Able to draw or tell 2-3 benefits on composting.** | **Able to draw or tell 1-2 benefits on composting.** | **Unable to draw or tell any benefits on composting.** |